

REMARKS

Reconsideration of this application as amended is now being requested. Claims 1-13, 15-19 and 23 are now in this application. Claims 14 and 20-22 have been canceled. Claims 15 and 23 have been amended.

The specification has been amended to include U.S. Application Serial Numbers for several U.S. Applications noted in the Related Application section of the specification.

Claims 14 and 23 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 7 and claims 13 and 19 of copending Application No. 09/918,392. Claim 14 has been canceled and claim 23 has been amended to now depend upon claim 15.

Claims 1-13, 15-19 and 23 were rejected under 35 U.S.C. 103(a) as being unpatentable over Gutierrez et al (IEEE, An Introduction to PSTN for IS-95 and cdma 2000) in view of Dent (US 5,584,057). In combining Gutierrez and Dent to reject claim 1, the office action states the following. First, Dent teaches that it is common for CDMA systems to transmit at different power levels based on the distance of the mobile station to the base station, thus, it would have been obvious to one of ordinary skill splitting a transmission signal at the base station in power levels necessary to comply with power tapering technique. Second, Dent identifies as a problem the interference caused by relatively high strength signals to which the lower strength signals are subjected when both signals are transmitted over the same frequency at the same time. The office action concluded that based on the teachings of Dent, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to solve the problem identified by phase sweeping the split signals with different frequencies, as disclosed by Gutierrez and thus in this manner decrease the possibility of interference between higher and lower strength signals. Applicant respectfully disagrees.

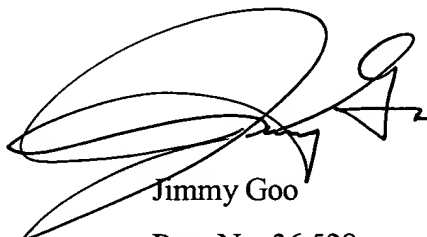
To establish a prima facie case of obviousness, the prior art reference must teach or suggest all the claim limitations and there must be some suggestion or motivation in the references themselves or in the knowledge generally to modify the reference or combine the references. Applicant does not believe these criteria were met by Gutierrez and/or Dent. Claim 1 involves splitting a signal into two signals where one of the signals has an associated power level higher than the other signal, and then phase sweeping the other signal associated with the lower power level. Gutierrez teaches splitting a signal into two signals and then phase sweeping the two signals, and Dent teaches amplifying (and then transmitting) signals intended for different mobile stations at different power levels depending on the distances at which the mobile stations are from the transmitting base station. Neither of the references, alone or in combination, teaches associating different power levels to two signals intended for a same mobile station. In fact, Dent would teach the opposite. As noted by the office action, Dent teaches transmit power levels based on distance the mobile station is from the base station. In the present invention, the two signals (resulting from the split) are intended for a same mobile station. That is, the distance the two signals would have to travel would be essentially the same. Thus, based on Dent, the transmit power level for these two signals (intended for a same mobile station) would be the same (not different). Accordingly, it is felt that claim 1 is patentable under 35 U.S.C. 103(a) over Gutierrez in view of Dent.

Claims 2-13 depend upon, and include all the limitations of claim 1 and thus are also felt to be patentable under 35 U.S.C. 103(a) over Gutierrez in view of Dent.

Claims 15-19 and 23 did not require splitting a signal into two signals associated with different power levels. Thus, applicants do not believe the distinction described above for claims 1-13 should apply. Regardless, applicants still believe that claims 15-19 and 23 are patentable over Gutierrez and/or Dent in that these claims include the limitation of phase sweeping the two signals in opposite direction. Such limitation would allow energies associated with the two signals to be concentrated near a carrier frequency. By contrast, Gutierrez teaches sweeping the phase of one antenna relative to the other antenna (see Gutierrez col. 1). The phase swept path taught by Gutierrez is really the

carrier frequency plus an intentional frequency offset (see col. 2). Gutierrez (nor Dent) does not teach phase sweeping in an opposite direction. According, it is felt that claims 15-19 and 23 are patentable under 35 U.S.C. 103(a) over Gutierrez in view of Dent.

Respectfully submitted,
Roger David Benning
R. Michael Buehrer
Paul Anthony Polakos
Robert Atmaram Soni

A handwritten signature in black ink, appearing to read 'Jimmy Goo', with a stylized, looped flourish extending from the end of the signature.

Reg. No. 36,528

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